Appnt.: A. Yufa

GAU 2877

line 7, after "devices." insert

--Also the devices, based on scattered light collection and some other detection methods (for example, by light splitting), use a different variations of the analog comparison method for the particle counting and measuring. Such methods can be illustrated, for example, by U.S. Patent No.4,798,465, wherein is shown the particle size detection device, using one of the particle measuring comparison method variations. The signals from detectors via the amplifiers follow to the comparators, which are connected to the reference voltage means. The amplified detected signal is compared with the predetermined reference voltage for the particle size qualifying. Such analog methods cannot provide a sufficiently high sensitivity related to the increasing environmental requirements, because of the non-precise analog method of comparison.--;

line 14, change "measuring" to --measuring--.

Page 6, after line 3 insert --It is yet further object of the invention to provide an improved method and device for substantial decreasing of the light (laser) power source.--

lines 7, 9, 11, 13, 14 delete "devices";

delete line 16 in its entirety and insert therefor

-- device with the divided particle flow tubular means.--;

delete line 18 in its entirety and insert therefor

--device with non-divided particle flow tubular means.--.

Page 7, delete lines 1, 2 in their entirety;

line 3, change "10" to --9-- and delete "of the second variant";

line 5, change "11" to --10--;

line 6, change "12" to --11-- and after "with" insert --the--;

line 10, delete "achieving";

line 15, change "inside" to --within a particle monitoring region of--;

line 16, after "signals" insert --,-- and after "means" insert --,--,

line 17, change "processing of the signals" to --signal processing-- and delete "display-";

line 18, change "ing information." to --information displaying -- and change "amplitude or" to --direct detection of the particles and--

Page 8, delete lines 1-7 in their entirety and insert therefor

--By an improved method, the improved timing processing of the detected signals is provided by strobing of the digital form pulses, created from the appropriate amplified detected signals having the durations proportional to the appropriate size of the particles intersecting the light beam.--;

line 14 change "a laser beam" to --a low power light or laser--;

line 15, after "tubular" insert --(capillary)-- and change "The" to --For example, the-- and change "particles, is" to --particle passage, can be divided--;

line 16, change "interrupted" to --(interrupted)-- and after "area" insert --to the inlet particle flow tubular means and outlet particle flow tubular means--;

line 17 after "has" insert --a--.

Page 9, line 1 change "the block-diagram" to --a simplified presentation--; line 3, after "is" insert --by a multiplexed bus 25--;





delete lines 5-8 in their entirety;

change "10" to --9-- and change "time method processing" to line 9, --a timing processing--;

change "11" to --10-- and change "timing diagram" to line 12, --timing-diagram--;

change "12" to --11-- and change "," to --.-; line 14,

change "comprises" to -- This device comprises -- and line 15, after "by" insert --a-- and after "optic" insert --connecting--;

after "is" insert --electrically-- and after "including" insert line 16, analog-digital subsystem 14 and a control subsystem 13, comprising--;

after "3" insert --within the particle monitoring region--. line 19,

change "obstructs the light" to --is an obstruction for the light in the Page 10, line 3. direction--;

after "4." insert -- The bigger particle, the less light intensity on the line 4. light detection means 4. For other detecting principles (for example, for scattered light collection by lens or mirror collecting system), the light intensity on the light detection means will be presented when the particles intersect the laser beam. The bigger particle, the higher light intensity.--;

change "The signals detected by the light detection means 4, (see line 5. Fig. 11a)" to -- The output, containing the information about duration of the signals detected by the light detection means 4 (see Fig. 10a), from the light detecting system 11--;

change "9" to --8--; line 6.

change "10, these signals from light detection means 4 of" to --"9, line 7. this output from-- and change "means 11" to --system 11--;

delete lines 9, 10 in their entirety;

delete lines 11-16 in their entirety;

change "10" to --9-- and change "(Fig.11b)" to --(Fig.10b)--; line 17.

after "digital" insert --form-- and change "(Fig. 11c)" to --(Fig. 10c)-line 18,

and change "of" to --following from--after "or" insert --by--; Page 11, line 1,

change "Figs.9, 10" to --Fig.9--; line 3.

change "time" to --timing--; line 4,

change "11c" to --10c--; line 5.

change "11d" to --10d-- and after "in" insert line 6,

-- the microprocessor subsystem 20 of -- and after "signals (" insert -- the packs of strobe pulses, see-- and change "11e" to --10e--;

after "7;" insert -- (an appropriate different quantity of strobe line 7.

after "beam," insert -- The quantity of the strobe pulses within the strobe pulse pack contains information about particle size. The more strobe pulses within the strobe pulse pack, the bigger particle size. The quantity of the identical strobe pulse packs (packs, having the same quantity of the strobe pulses within) characterizes the quantity of the identical



pulses)--;